



SEQUENCE LISTING

<110> Desjarlais, John R.

<120> APPARATUS AND METHOD FOR DESIGNING
PROTEINS AND PROTEIN LIBRARIES

<130> 16380-003001

<140> US 10/071,859

<141> 2002-02-06

<150> US 09/877,695

<151> 2001-06-08

<150> US 60/266,711

<151> 2001-02-06

<160> 4

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<400> 1

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Leu | Pro | Ser | Gly | Trp | Thr | Gln | Leu | Thr | Lys | Ala | Ser | Asp | Asp | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Thr | Tyr | Tyr | Tyr | Asn | Lys | Thr | Thr | Asp | Val | Val | Thr | Asn | Thr | Arg | Pro |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Asp | | | | | | | | | | | | | | |

<210> 2

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<221> VARIANT

<222> 1

<223> Xaa = Ser, Asn, or Asp

<221> VARIANT

<222> 8

<223> Xaa = Gln, Lys, Pro, Val, Glu, or Arg

<221> VARIANT

<222> 10

<223> Xaa = Thr or Lys

<221> VARIANT

<222> 12

<223> Xaa = Ala or Ser

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<223> Xaa = Ser or Gly

<221> VARIANT

<222> 15

<223> Xaa = Asp, Asn, Glu, or Ser

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<222> 22

<223> Xaa = Lys or Gln

<221> VARIANT

<222> 24

<223> Xaa = Thr or Ser

<221> VARIANT

<222> 25

<223> Xaa = Asp or Asn

<221> VARIANT

<222> 27

<223> Xaa = Val or Lys

<221> VARIANT

<222> 31

<223> Xaa = Arg, Asn, or Gln

<221> VARIANT

<222> 34

<223> Xaa = Asp or Asn

<400> 2

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Leu | Pro | Ser | Gly | Trp | Thr | Xaa | Leu | Xaa | Lys | Xaa | Xaa | Asp | Xaa | Thr |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Tyr | Tyr | Tyr | Asn | Xaa | Thr | Xaa | Xaa | Val | Xaa | Thr | Asn | Thr | Xaa | Pro |
| | | | 20 | | | | 25 | | | | | 30 | | | |

Thr Xaa

<210> 3

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<221> VARIANT

<222> 1

<223> Xaa = Ser, Asn, Asp, or Glu

<221> VARIANT
<222> 8
<223> Xaa = Gln, Lys, Pro, Val, Glu, Arg, or Asn

<221> VARIANT
<222> 9
<223> Xaa = Leu or Gln

<221> VARIANT
<222> 10
<223> Xaa = Thr or Lys

<221> VARIANT
<222> 12
<223> Xaa = Ala or Ser

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<221> VARIANT
<222> 14, 25, 29, 34
<223> Xaa = Asp or Asn

<221> VARIANT
<222> 15
<223> Xaa = Asp, Asn, Glu, or Ser

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<222> 16
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<222> 26
<223> Xaa = Val, Thr, or Gln

<221> VARIANT
<222> 27
<223> Xaa = Val, Lys, or Thr

<221> VARIANT

<222> 28

<223> Xaa = Thr or Gln

<221> VARIANT

<222> 31

<223> Xaa = Arg, Asn, or Gln

<400> 3

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Leu | Pro | Ser | Gly | Trp | Thr | Xaa | Xaa | Xaa | Lys | Xaa | Xaa | Xaa | Xaa | Xaa |
| 1 | . | | | 5 | | | | 10 | | | | | 15 | | |
| Xaa | Tyr | Xaa | Tyr | Asn | Xaa | Thr | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Thr | Xaa | Pro |
| | | | 20 | | | | 25 | | | | | | 30 | | |
| Thr | Xaa | | | | | | | | | | | | | | |

<210> 4

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<221> VARIANT

<222> 1

<223> Xaa = Ser, Asn, or Asp

<221> VARIANT

<222> 8

<223> Xaa = Gln or Lys

<221> VARIANT

<222> 10

<223> Xaa = Thr or Lys

<221> VARIANT

<222> 12

<223> Xaa = Ala or Ser

<221> VARIANT

<222> 13

<223> Xaa = Ser or Gly

<221> VARIANT

<222> (14)...(15)

<223> Xaa = Asp or Asn

<221> VARIANT

<222> 17

<223> Xaa = Thr or Val

<221> VARIANT

<222> 19

<223> Xaa = Tyr or Phe

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<222> 22
 <223> Xaa = Lys or Gln

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<221> VARIANT
 <222> 34
 <223> Xaa = Asp or Asn

<400> 4
 Xaa Leu Pro Ser Gly Trp Thr Xaa Leu Xaa Lys Xaa Xaa Xaa Xaa Thr
 1 5 10 15
 Xaa Tyr Xaa Tyr Asn Xaa Thr Xaa Xaa Val Xaa Xaa Asn Thr Xaa Pro
 20 25 30
 Thr Xaa